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FOREST INSECT INVESTIGATIONS

F. C. Craighead, in Charge

Dr. F. C. Craighead spent three days in Denver, Colo., in the latter part of April, conferring with J. M. Miller and J. C. Evenden. Plans were arranged for the conduct of investigative work for the coming summer and for the carrying on of certain projects in cooperation with the Forest Service. As a result of the increase in appropriations for the Division of Forest Insects for the coming fiscal year, a new field laboratory will be established at Portland, Oreg., with F. P. Keen in charge.

At the present time considerable interest is manifested in the widespread destruction being wrought by termites to the foundations and interiors of buildings in all parts of the country, especially in the Central and Southern States. A recent survey of the buildings in Memphis, Tenn., by city officials, indicates that from 60 to 70 per cent of them are infested by termites. Similar reports are being received from New Orleans, La., and other cities in the Southern States.

Officials in the various cities are cooperating with the Bureau of Entomology in effecting the control of termites in buildings. In most instances the entrance of the subterranean type of termites into foundations is due to improper methods of construction. To rectify this situation the bureau is recommending brief suggestions for inclusion in mandatory city building codes.

Contributions from the Gipsy-Moth Laboratory

Recent visitors to the Gipsy-Moth Laboratory have been William H. Thorpe, Demonstrator in Entomology, Zoological Laboratory, Cambridge, England, April 2, and H. B. Peirson, Forest Entomologist of Maine, R. L. Taylor, graduate student, Bussey Institution, Forest Hills, Mass., and W. A. Baker, Bureau of Entomology, European Corn Borer Laboratory, Monroe, Mich., April 8.

A shipment of approximately 30,000 cocoons of the oriental moth, Cnidocampa flavescens Walk., reached the Gipsy Moth Laboratory on April 29. These were collected in Japan by T. R. Gardner, of the Japanese Beetle Laboratory, Yokohama, through the cooperation of Dr. A. L. Quaintance and Mr. L. B. Smith. The oriental moth is well established in Boston, Mass., and vicinity, having been first observed there in 1906. Rather large collections of larvae and pupae made in recent years have indicated that parasism there is negligible; and the shipment of cocoons from Japan was made as an attempt to establish where needed in this country parasites that attack it in the Orient, especially a tachinid, Chaetexorista javana B. & B.

TAXONOMIC INVESTIGATIONS

Harold Morrison, in Charge

Professors J. G. Needham, C. R. Crosby, and Paul Needham, of the Department of Entomology, Cornell University, visited the Bureau of Entomology, including the Division of Taxonomy and Interrelations of Insects, on April 1. At this time Dr. J. G. Needham returned to the National Collection a part of the Chinese dragonflies which he had borrowed for study at the time he worked in the collections in last January.

Frank Johnson, of New York City, came to Washington on April 2 to consult with Dr. Schaus, and to deposit in the Museum Collection a gift of some rare species of Lepidoptera.

George P. Englehart, of the Brooklyn Museum, Brooklyn, N. Y., who was returning from an extensive collecting trip in Florida, stopped in Washington on April 4 to complete the arrangements which have been under consideration for the deposit of the Brooklyn Museum collection of Lepidoptera in the United States National Museum.

In accordance with arrangements completed previously, Dr. W. Schaus went to Brooklyn, N. Y., for the week of April 8 to 15, to examine the Lepidoptera which the Brooklyn Museum has decided to deposit in the United States National Museum Collection. He brought back by hand several hundred types which he had picked out of the collections. The cases containing the remainder of the specimens, some 65,000 in all, have been shipped to Washington by truck and will be installed in the Division of Insects at once.

V. S. L. Pate, a graduate student in the Department of Entomology, Cornell University, spent April 4 to 6 examining types and other material of sphecoid wasps of the tribe Oxybelini in the National Collection. He is engaged in a revision of this tribe, and while here arranged to borrow certain specimens from the Philippine Islands.

G. J. Hauessler, of the field laboratory at Moorestown, N. J., called at the National Museum April 4 to consult bureau specialists about hymenopterous parasites of the Oriental peach moth.

Dr. P. W. Classen, of the Department of Entomology, Cornell University, visited the taxonomic unit in the first week in April to consult with some of the specialists and to examine the National Collection of Plecoptera.

John W. Angel, of New York City, spent April 15 and 16 studying types of beetles, particularly those of the family Lucanidae, in the Casey collection of Coleoptera.

Miss Grace Sandhouse, of the taxonomic unit, spent the last week of April in Philadelphia studying bees in the collection of the Academy of Natural Sciences, particularly the Cresson types of Osmia and related genera.

On April 23 Dr. Herbert Osborn, of Ohio State University, called at the Museum to examine types of Homoptera in the National Collection.

On April 25 Dr. E. D. Ball, Dean of the College of Agriculture, University of Arizona, at Tucson, and Director of the Agricultural Experiment Station, worked on some of the Homoptera in the collections.

Dr. Joseph Bequaert, of the School of Tropical Medicine, Harvard University, visited the Museum April 26 to compare specimens of blood-sucking flies and of certain diplopterous wasps.

INSECTS AFFECTING MAN AND ANIMALS

F. C. Bishopp, in Charge

F. C. Bishopp left Washington April 3 for Los Angeles, Calif., where he appeared as a witness in court in a case involving alleged infringement of the Insecticide Act by the manufacturer of a proprietary insecticide. Later he conferred with Prof. W. B. Herms and others, at the University of California, and then went to the Coachella Valley, in California, where a new field laboratory is being established for the study of the eye gnat, a species of Hippelates, which is a serious pest of man in that locality. On his return trip he visited the field laboratories at Tucson, Ariz., and El Paso, Uvalde, Sonora, Menard, and Dallas, Tex., and reached Washington April 28.

D. C. Parman, of the field laboratory at Uvalde, Tex., went to Los Angeles April 10, for conference with Mr. Bishopp. He is now in the Coachella Valley, conducting preliminary investigations on the biology and control of the eye gnat.

W. G. Bruce, of the field laboratory at Fargo, N. D., did considerable traveling during April in North Dakota and Minnesota, in the course of his investigations concerning cattle grubs. While in St. Paul, Minn., he conferred with members of the State experiment station and extension staffs on certain phases of the problem.

W. V. King writes from Manila, where he is investigating the malaria mosquitoes of the Philippine Islands, under the auspices of the International Health Board, that he expects to return to his duties at Mound, La., about June 15.

TRUCK-CROP INSECT INVESTIGATIONS

J. E. Graf, in Charge

Dr. N. F. Howard, Columbus, Ohio, attended the spring meeting of the Tri-States Packers Association at Baltimore, Md., on April 3 and 4, where he discussed the control of the Mexican bean beetle along the Atlantic seaboard. He visited Washington en route, on his return to Columbus.

Dr. B. A. Porter, of the Washington office of Deciduous Fruit Insect Investigations, visited the field laboratory at Columbus, Ohio, on April 6.

J. R. Douglass, in charge of the field laboratory at Estancia, N. M., who has spent two months at the field laboratory at Columbus, Ohio, visited Washington April 9 to 13, and consulted with bureau officials regarding his work in New Mexico. Mr. Douglass is preparing a manuscript on the effects of rainfall and temperature on the winter survival and spring emergence of the Mexican bean beetle at various altitudes and in different life zones. En route to Estancia he visited the field laboratory for the study of cotton insects at Tallulah, La.

R. E. Campbell, in charge of the field laboratory at Alhambra, Calif., reported that during the period April 8 to 15 G. A. Dean, F. C. Bishopp, D. C. Parman, W. S. Abbott, W. M. Davidson, L. J. Bottimer, and D. N. Borodin visited the laboratory.

Dr. L. O. Howard visited the field laboratory at Madison, Wis., on April 15.

On April 19 C. I. Bliss, of the field laboratory at New Orleans, La., and E. O. Essig, of the State experiment station at Berkeley, Calif., were in Alhambra, Calif., and gave talks at the regular meeting of the Entomological Club of Southern California.

On April 20 R. E. Campbell, Alhambra, Calif., inspected lettuce fields in the Salinas Valley, where a serious aphid infestation was found; he also conferred with O. H. Lovell at San Jose, Calif., regarding the situation as to the vegetable weevil at that place.

Rodney Cecil returned to the field laboratory at Geneva, N. Y., on April 22, where he will resume his studies on bean insects. He spent last winter at the field laboratory at Columbus, Ohio.

Dr. Dayton Stoner, whose temporary appointment as field assistant at the field laboratory at Sanford, Fla., expired on April 14, visited Washington April 22 to 27, to confer with bureau officials regarding his past season's work on predators, particularly birds, of the celery leaf-tyer.

E. D. Ball, Director of the Agricultural Experiment Station at Tucson, Ariz., visited Washington on April 22 and 23, and discussed with bureau workers a manuscript on the celery leaf-tyer which he had prepared jointly with them.

Temporary appointments as field assistants have recently been given G. T. York and W. I. Duplessis, assigned to duty at Alhambra, Calif., P. M. Eide and A. E. Bonn, assigned to duty at Puyallup, Wash., and R. W. Dean, assigned to duty at Geneva, N. Y.

G. F. Knowlton, of the Utah Agricultural Experiment Station, at Logan, has recently been appointed a collaborator in investigations on the sugar-beet leafhopper.

DECIDUOUS-FRUIT INSECT INVESTIGATIONS

A. L. Quaintance, in Charge

O. I. Snapp, in charge of peach-insect investigations at Fort Valley, Ga., writes that the present curculio infestation in the Georgia peach belt is the heaviest in eight years. A vigorous campaign of suppression is being waged in order to control the second generation, which will attack the matured fruit. A heavy infestation was anticipated, on account of the quantity of wormy peaches left in the orchards last year, and the low mortality of adults during hibernation.

Contributions from the Japanese-Beetle Laboratory

W. A. Baker, of the field laboratory at Monroe, Mich., for the study of the European corn borer, visited the Laboratory on April 21 to study the various methods used in rearing parasites of the Japanese beetle.

Lead arsenate, in the form of a top dressing, applied to turf for the control of Japanese beetle larvae, is being extensively used in the infested area this spring. On the Lansdowne, Pa., golf course the putting greens were treated with it in the autumn of 1928 and again in the spring of 1929. Lead arsenate was applied at the rate of 3 pounds to 1,000 square feet for each treatment. Examination of the turf on April 30 revealed no living larvae. The degree of infestation in the autumn of 1928 was more than 35 larvae to each square foot.

Loren B. Smith was recently elected President, and C. W. Bailey Secretary-Treasurer, of the Federal Business Association of Camden, N. J. This Association has jurisdiction over all Federal activities located in New Jersey south of Trenton. At present fifteen departmental and independent establishments are represented in it.

TROPICAL, SUBTROPICAL, AND ORNAMENTAL PLANT INSECT INVESTIGATIONS

A. C. Baker, in Charge

In company with Dr. C. L. Marlatt, Dr. A. C. Baker left Washington, D. C., on April 9 to confer with officials of the Florida State Plant Board concerning the recent outbreak of the Mediterranean Fruit Fly. Dr. Baker is now giving special attention to investigations which are necessary in the program of eradication.

On April 16, during the noon hour, E. A. McGregor spoke over K F I at Los Angeles on the subject "The Citrus Thrips and Its Control." This is probably the most powerful broadcasting station on the Pacific Coast, and the reception was clear at least as far as Lindsay.

During the latter half of April The Western Dusters, a commercial company, have been cooperating with E. A. McGregor in applications of sulphur by airplane for the possible control of the citrus thrips. The preliminary calculations of the expected destruction of citrus thrips by this method seem to give considerable promise.

CEREAL AND FORAGE INSECT INVESTIGATIONS

W. H. Larrimer, in Charge

Carl Heinrich, of the Taxonomic Unit, sailed from New Orleans on April 12 for Guatemala, to investigate reported occurrence of the European corn borer in that country, and to study related species of Pyrausta and their parasites. He will be absent about ten weeks.

W. A. Baker, of the field laboratory at Monroe, Mich., spent April 8 to 10 at the headquarters for corn-borer research, at Arlington, Mass.

Lowell A. Woodbury was appointed on April 2 as Field Assistant, for duty at the field laboratory at Salt Lake City.

On April 19 Prof. Geo. A. Dean, of the Kansas Agricultural Experiment Station, while en route from California to Manhattan, Kans., stopped at Salt Lake City, Utah, to confer with Geo. I. Reeves, in charge of the field laboratory there.

Professor Herbert Osborn, of the Ohio State University, spent some time at the Washington office of this division during intervals of attendance at the sessions of the National Academy of Sciences, which were held April 22 to 24.

STORED-PRODUCT INSECT INVESTIGATIONS

E. A. Back, in Charge

Gilbert A. Schenk, Associate Entomologist, who has been conducting at Manhattan, Kans., the bureau's work on flour-mill insects, resigned his position April 30, to engage in the commercial manufacture of fumigants, with headquarters at Kansas City.

A business firm in California has recently written to A. O. Larson, of the field laboratory for dealing with bean weevils, at Modesto, Calif., "Please permit me to congratulate you and your able assistant, Mr. Fisher, in the splendid work that your office has been doing in the control of bean weevil in this country. We have not received even one complaint or rejection from purchasers of beans on account of weevil this past season and we deem this entirely due to your method for control at harvesting. Many San Francisco dealers advise us the same experience. With the cooperation, this coming season, of San Joaquin and Merced Counties we look for much less evidence of the pest. Both of you gentlemen must have exercised considerable diplomacy to hold the good will of the growers and the assistance of warehousemen and dealers. Let the good work proceed."

BEE CULTURE INVESTIGATIONS

James I. Hambleton, in Charge

Miss Malitta D. Fischer, of the American Honey Institute, Indianapolis, Ind., visited the Bee Culture Laboratory on April 1 to 3.

W. D. Achord, of Findlay, Ohio, and Fitzpatrick, Ala., one of the pioneer breeders of bees in combless packages, and a queen breeder of note, while on his way from the South to Ohio visited the laboratory April 26, to discuss methods of shipping bees and the standardization of combless packages.

Richard B. Gregg, of Chestnut Hill, Mass., formerly of Simla Hills, India, was a recent visitor at the laboratory. He has been successful in the difficult task of importing Italian bees from England into India. Since his return from India, however, he has received word that these bees have been destroyed by predatory wasps or hornets, a serious pest to bees in India. Mr. Gregg said that the production of honey in India is very small, because the native hive bee (Apis indica) stores only a few pounds of honey per colony. In order to increase the production of honey there he is anxious to introduce the bee Apis mellifica.

Dr. E. F. Phillips, of Cornell University, Ithaca, N. Y., spent several days at the laboratory early in April, consulting material in the bibliography.

E. R. Root, senior member of the A. I. Root Co., Medina, Ohio, visited the laboratory April 18 to discuss various beekeeping matters. He has recently made extended studies of beekeeping in California, Mexico, and Central America.

Mr. and Mrs. Clyde Wheeler, commercial beekeepers, of Oberlin, Ohio, visited the laboratory April 2. Mrs. Wheeler (nee Iona Fowls) was formerly connected with the A. I. Root Co., of Medina, Ohio. Her father was one of the pioneer beekeepers in Ohio. Mr. Wheeler produces honey of high grade, and was awarded first prize on comb honey at the Ohio State Fair in 1927.

COTTON INSECT INVESTIGATIONS

B. R. Coad, in Charge

On April 13 R. C. Gaines, of the field laboratory at Tallulah, La., and T. P. Cassidy, in charge of the field laboratory at Tucson, Ariz., conferred at Stillwater, Okla., with representatives of the Oklahoma Agricultural and Mechanical College, on plans for cooperative work on control of the boll weevil in Oklahoma in 1929. It was agreed that four phases of the work should be carried on. 1. The Bureau of Entomology will cooperate with the Oklahoma Experiment Station and Extension Service in making control tests at three points in the infested area. 2. The Department of Entomology of the Experiment Station will conduct a series of similar experiments in cooperation with local farmers in many different counties. 3. The Extension service will conduct a large number of demonstrations of methods of control in counties where there are infestations, using methods of control recommended by the cooperating agencies. 4. At weekly intervals during the season the bureau will make records of infestations through the infested territory, and the records will be considered and analyzed by a central committee at the College. Recommendations for control, based on these records, will be made by the Extension Service and promptly forwarded through regular channels to the localities concerned.

H. C. Young, of the field laboratory at Tucson, Ariz., reached Tallulah, La., on April 22, for conference with reference to cooperative work in Oklahoma.

On April 20 J. R. Douglass, of the Mexican Bean Beetle Field Laboratory, Estancia, N. M., visited the field laboratory at Tallulah, for information on dusting machinery.

Dr. W. E. Hinds, Entomologist, Louisiana State Experiment Station, visited Tallulah early in April for a conference with B. R. Coad.

Three patents and a patent on a process, all concerning the drying of seed cotton, have been received in April at the division's headquarters at Tallulah. The investigations on cotton drying have been carried on by the Division of Agricultural Engineering, Bureau of Public Roads, in cooperation with the Division of Cotton Insects of the Bureau of Entomology.

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Mabel Colcord, Librarian

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